DOCUMENT RESUME

ED 267 486 EA 018 195

AUTHOR Glines, Don
TITLE An Introductory Annotated Bibliography on (1) Societal Futures, (2) Educational Futures, (3) Educational Alternatives and Change.
PUB DATE Aug 85
NOTE 34p.
PUB TYPE Reference Materials - Bibliographies (131)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Annotated Bibliographies; *Educational Change; Educational Theories; Elementary Secondary Education; *Futures (of Society); Postsecondary Education; *Resource Materials; Technological Advancement

ABSTRACT

Important works by over 100 authors are cited in this annotated bibliography of works relating to our changing world and changes in the education that world will need. The bibliography is divided into three sections. The first section discusses works that analyze the nature of social change and the challenges offered by change, and predict results of change. Works by 75 authors are considered and an additional 50 authors writing on social change are listed. The bibliography notes that the references cited merely touch the surface and that grasping the full implications of change will require investigating a broad spectrum of subjects. The second section of the bibliography focuses on the future of education in particular. Over 50 works by 31 authors are annotated and several additional works are cited without annotations. The third section lists works specifically concerned with the nature of educational change. Works by 16 authors are annotated and over 60 additional authors worth reading on the subject are listed. The bibliography is intended only as an introduction to the topic of futures. Most of the works cited are identified as good sources of recommendations for further reading. (PGD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Don Glines

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED267486

AN INTRODUCTORY ANNOTATED BIBLIOGRAPHY

ON

(1) SOCIETAL FUTURES

(2) EDUCATIONAL FUTURES

(3) EDUCATIONAL ALTERNATIVES AND CHANGE

August 1985 Edition

EA 018 195

Short Annotated Bibliography

		Page
INTRODUCTION		ii
PART I:	VIEWS OF SOCIETAL FUTURISTS - RECENT AND PAST	1
PART II:	VIEWS OF EDUCATIONAL FUTURISTS - RECENT AND PAST	17
PART III:	VIEWS OF EDUCATIONAL CHANGE WRITERS - RECENT AND PAST	26

For further information, contact:

Dr. Don Glines, Administrative Section
Categorical Support Programs Division
State Department of Education
721 Capitol Mall
Sacramento, California 95814
(916) 445-7459

INTRODUCTION

Educators are preparing students to be successful members of the present global community and pro-active participants in creating future alternative societal directions. To effectively plan new and better learning systems to meet these challenges, leaders ought to be aware of more than the problems and opportunities that currently exist. They should have some knowledge of how values, attitudes, technology, jobs, life-styles, ecology, and political structures are changing, and the resultant implications for schools, education, and learning processes now and into the early part of the twenty-first century.

The many possibilities should be addressed by each individual interested in the role of education. How can present schools assist in a period of transformation? What do students who will be alive in the year 2050, and maybe 2100, need in the eighties to best provide not only for their lives now, but for the next seventy-five to one hundred years? How should education change? What is the process of transition toward transformation?

These questions create a desire for references: for the in-service education of staff; for personal growth; and for classroom applications. That is the purpose of this very introductory annotated bibliography. . . to offer suggestions as to where to begin an in-depth search of the potential alternative futures.

Part I focuses on global futures selections, as it is most important to first comprehend the events impacting people and societies throughout the world. Part II offers an introduction to the implications for education and to books on educational futures. Part III lists some of the educational change writers of the past years; these books still offer implementation assistance at the school/district level. For more complete listings, the following information sources and publications are especially recommended:

1) World Future Society, 4916 St. Elmo Street, Bethesda, MD 20814. WFS publishes a bimonthly journal, The Futurist, and a monthly Futures Survey, and a yearly Futures Survey Annual; these review the current literature. In addition, an introductory book on the futures field (The Study of the Future), a resource book on futures (The Future: A Guide to Information Sources, 2nd Edition), subsections (such as Education Tomorrow), and a series of conferences and seminars are offered by the World Future Society. Individual and institutional memberships are available. The FUTURE SURVEY publication is a "must read" subscription.

2) Global Futures Network, 22 College Street, Suite 107, Toronto, Ontario, Canada MSG142 (416-964-1626) is another must be involved with organization. Their quarterly publication, Global, Futures Digest, is excellent. They have a Futures Network directory of members, and publish materials such as the book Optimistic Outlook.

3) For World order issues, and excellent World Policy Papers, a fine source is the World Policy Institute, 777 United Nations Plaza, New York, New York 10017.

4) The Worldwatch Institute, 1776 Massachusetts Ave., N.W., Washington, D.C. 20036, is an outstanding source of papers on the global dilemmas. Over 70 Worldwatch Papers summarize many of the most important topics.

The best source of books on the mind, consciousness, and society is The Institute of Noetic Sciences, 475 Gate Five Road, Sausalito, CA 94965. Write for their "Book List and Publication Bulletin."

The bibliography sections in most of the books listed in this guide contain extensive resource lists which are of value to educators. The items included in the following pages are not exclusive or extensive, but are only intended as introductory references.

PART I: VIEWS OF SOCIETAL FUTURISTS - RECENT AND PAST

Asimov, Isaac. A Choice of Catastrophes: The Disasters that Threaten Our World, Simon and Schuster, New York, NY, 1979. Asimov, one of the most prolific writers, outlines five types of catastrophes which could end present human life: heat death; solar system collision; attack from outer space; annihilation by war or disease; devastation by resource depletion or overpopulation. The last two people of today can control. Will they?

A good companion book by Asimov is Roving Mind (Prometheus), 1983.

Barnet, Richard. The Lean Years: Politics in the Age of Scarcity. Simon and Schuster, New York, NY, 1980. Barnet writes that a world of scarcity is a world of inevitable struggle. The status of five critical resource systems--energy, nonfuel minerals, food, water, and human skill--indicate that if peace and prosperity are desired, a new global planning system and new survival values are essential.

Beer, Francis. Peace Against War: The Ecology of International Violence. W. H. Freeman, San Francisco, 1981. A survey of contemporary social and scientific knowledge about peace and war. Projections are given of what is likely to happen if current trends continue. Alternatives are suggested as to how to achieve war limitation and peace creation. Realistically, the choices are restricted, but conditions can be improved, according to the author. The book concludes with a bibliography of 2,400 items related to peace and war.

Boulding, Kenneth. Social Systems of the Planet Earth, Addison-Wesley, Reading, MA, 1980. Boulding is excellent at outlining the events and occurrences that are shaping the future. Social Systems of the Planet Earth follows his previous The Meaning of the Twentieth Century; From Abundance to Scarcity; Stable Peace; Redistribution Through the Financial System; and Ecodynamics. His 1981 (Evolutionary Economics) (Sage) continues the view that this is a middle period in the transition of humankind.

Brandt (Independent) Commission Report. North-South: A Programme for Survival, MIT Press, Cambridge, MA, 1980. Seventeen international scholars met for ten weeks under the direction of Willy Brandt, former chancellor of West Germany, to examine the North-South dialogue as it relates to a new international order. The report indicates that the risks to humankind are more serious than people have been told, the problems are easier to understand than have been admitted, and the decisions are more obvious than seems to be the case. It is a clear statement of the international demands, refusals, ideas, dreams, and obstacles, and clearly indicates that there will be no real world peace--while starvation and malnutrition continue. Common Crisis North-South: Cooperation for World Recovery (MIT Press, Cambridge, MA, 1983) is the follow-up Second Brandt Commission Report.

Brown, Lester. The Twenty-Ninth Day: Accommodating Human Needs and Numbers to the Earth's Resources, W. W. Norten, New York, NY, 1978. The president of Worldwatch Institute has published often on current global topics. Members of the Worldwatch Institute have produced over 70 excellent booklets and nine books on a variety of potential crises: deserts, water, population, food, energy, unemployment, transportation, et al. In this publication,

Brown uses the lily pond as a metaphor on exponential growth, noting that it takes 29 days to fill half of the lily pond; the other half fills the 30th day. The planet may be nearing that day. The stress on fishing, forests, grasslands, and croplands indicates that the globe is facing a period of profound change.

Building A Sustainable Society (W. W. Norten, New York, 1981) updates his views and data related to environmental stresses, and concludes with steps to sustainability--a worthwhile companion book to the above, The Twenty-Ninth Day.

Brown and the staff of the Worldwatch Institute, titled State of the World: 1984 (W. W. Norten, 1984) inaugurates an annual series of planned state of the world reports. This first one cites developments toward a sustainable society, covering 11 major topics. Brown calls for a shift in development strategies and a reordering of priorities.

Capra, Fritjof. The Turning Point: Science, Society, and the Rising Culture. Simon and Schuster, New York, NY, 1982. Capra presents a systems view of life and economics, and stresses the need to change values and paradigms. Society is still trying to apply the concepts of an outdated world view. A transformation is in process; people must develop a new vision of reality. The obsession with growth must be overcome. A systems approach to integrating knowledge will lead to new directions. The views of Capra are similar in many ways to those of Henderson, Illich, Lovins, and Schumacher.

Cetron, Marvin and O'Toole, Thomas. Encounters With the Future: A Forecast of Life Into the 21st Century. McGraw-Hill, New York, 1982. Extensive analysis and synthesis of data by computer projections is a feature of this book. It is helpful in looking at job and career possibilities in the years ahead and, right or wrong, in its specific assessments. It is basically positive in tone, but avoids serious discussion of the arms race, international economy, and pollution. It can be read with Megatrends: Ten New Directions Transforming Our Lives (John Naisbitt, Warner Books, New York, 1982), and with Kahn, The Coming Boom (see below). They are each optimistic, but lack depth of perception.

Clarke, Arthur. Profiles of the Future, Rev. Ed., Harper and Row, New York, NY, 1973. Clarke examines why prophets of the past have failed to foresee the future. He explores futures topics such as ocean mining and space and then presents his technological forecasts for the next 150 years, pointing out that while it is impossible to predict the actual future, general direction and realistic possibilities can be anticipated. Clarke, one of the classic futures writers, has also produced many well known science fiction novels: example, Imperial Earth (1976).

Cornish, Edward et al. The Study of the Future: An Introduction to the Art and Science of Understanding and Shaping Tomorrow's World. World Future Society, Bethesda, MD, 1977. A general overview introduction to the study of the future by leaders of the World Future Society. Both the optimistic and pessimistic views of pending crises and opportunities are presented, representing a variety of writers. A companion volume: The Future: A Guide to Information Sources (1979) is an excellent directory of information related to future resources. (2nd Edition)

Cousteau Society. Cousteau Almanac: Inventory of Life on Our Water Planet. Doubleday, New York, NY, 1981. An important first book covering in popular detail nearly every major environmental issue globally. It is designed as both a reference book and an accumulation of fascinating facts and stories for browsing. There are over 400 illustrations, including photos, maps, and cartoons. It was a three-year project of the Cousteau Society.

Deudney, Daniel and Flavin, Christopher. Renewable Energy: The Power to Choose. W. W. Norten, New York, 1983. Renewable energy is a power of choice. Humanity can meet many of its energy needs by harnessing the inexhaustible flows of energy that come from the sun, winds, water, living plants, and earth. Renewable energy can help narrow the inequalities between rich and poor within and between nations.

Didsbury, Howard, ed. Communications and the Future: Prospects, Promises, and Problems. World Future Society. Bethesda, MD, 1982. A compilation of 46 articles on the future of communications. It is especially helpful as an anthology covering many different topics, including hardware, software, and communications theory, the impact upon society and education, and human concerns. Writers include Harlan Cleveland, Yoneji Masuda, Bob Theobald, Michael Marien, Rashmi Mayur, Joseph Coates, and Bertram Gross. Helpful companions are Teletex and Videotex in the United States (John Tydeman, McGraw Hill, 1982); The Coming Information Age (Wilson, Dizard, Longman, 1982); and Exploring the World of the Personal Computer (Jack Nilles, Prentice-Hall, 1982).

Drucker, Peter. Toward the Next Economics. Harper and Row, New York, NY, 1981. One of the most prolific writers and speakers in the realm of management and economics, Drucker describes how world economics are changing, and that they must change if the transition of society is to be successful. The world economy appears to be growing far more competitive, with comparative advantages shifting against the developed countries. The nondeveloped countries will have a new role.

Ehrlich, Paul and Ehrlich, Anne. Extinction: The Causes and Consequences of the Disappearance of Species. Random House, New York, NY, 1981. The disparity rate between rate of loss and rate of replacement has become alarming, and could be catastrophic unless change occurs, according to the authors. Their new strategy is to transform society from one that primarily assaults ecological systems to one that husbands them. The views interrelate with those by Norman Myers in the Sinking Ark, and Lester Brown in the Twenty-Ninth Day and The Sustainable Society.

Epstein, Samuel. Hazardous Waste in America: Our Number One Environmental Crisis. Sierra Club Books, San Francisco, 1982. The U.S. produces over 85 million tons of hazardous chemical waste each year. The Environmental Protection Agency estimates 90 percent of it is disposed improperly and unsafely. This topic should be considered in conjunction with these other important books: America the Poisoned: How Deadly Chemicals Are Destroying Our Environment (Lewis Regenstein, Acropolis Books, 1982); Prescription for Death: The Drugging of the Third World (Milton Silverman, University of California Press, 1982); and Down to Earth: Environmental and Human Needs (Erik Eckholm, W. W. Norten, 1982).

Esfandiary, F. M. Optimism One; Telespheres; Up-Wingers; published as a trilogy by Fawcett-Popular Library, New York, NY, 1977 (published previously as separate hardback books). Esfandiary is one of the most optimistic writers about the future. He sees the coming of a golden age. There will be storms along the way during the decades of the eighties and nineties, but overall, the future of the twenty-first century looks glorious. Esfandiary is worth reading as a contrast to the gloom and doom, and the transformationist writers.

An interesting book to combine with Esfandiary is another upbeat forecast, The Hopeful Future by Harry Stine (Macmillan, New York, 1983). Stine asserts that we have the ability to choose and create a hopeful future, an optimistic megaculture of three different subcultures.

Etzioni, Amitai. Capital Corruption: The New Attack on American Democracy. Harcourt, Brace, Jovanovich, New York, 1984. An important book on the need for reform in government. Etzioni claims that "legal corruption" has reached great proportions in Washington, D.C., with lobbies and special interest groups seducing politicians, and politicians passing laws to legitimize the practices. Though political corruption cannot entirely be eliminated, it can be dramatically curbed. To accomplish this, Etzioni proposes 14 sweeping reforms, including public financing of congressional elections, shortening and thereby reducing the costs of political campaigns, and a public commission on corruption in politics.

Feather, Frank, Ed. Through the 80's: Thinking Globally, Acting Locally. World Future Society, Bethesda, MD, 1980. This book, prepared for the First Global Conference on the Future in Toronto, consists of a series of articles by many persons speculating on the future of a variety of global concerns. It is a good introduction to the views of futurists at the start of the decade.

Feather also edited another good introductory book, Optimistic Outlooks, Global Futures Network, 22 College Street, Toronto, Canada, 1982.

Feigenbaum, Edward and McCorduck, Pamela. 5th Generation, A and W Publishers, New York, 1983; and Asimov, Isaac and Warwick, Pamela. Machines That Think, Harper and Row, New York, 1983. These two books describe the current and future developments in the world of artificial intelligence. Tremendous breakthroughs are anticipated. The electronics war between Japan, Europe, and the U.S. for control of the market is causing an explosion in technological, computer, and electronics research.

Feingold, Norman and Miller, Norma. Emerging Careers: New Occupations for the Year 2000 and Beyond. Garrett Park Press, Garrett Park, MD, 1983.

Hundreds of new and emerging careers are identified in the fields of robotics, artificial intelligence, energy, oceans, space transportation, electronics, etc. For a more complete picture, read in conjunction with Careers Tomorrow: The Outlook for Work in a Changing World (Cornish, World Future Society, 1983); What Color is Your Parachute (Bolles, Ten Speed Press, 1983); and Encounters with the Future (Cetron, McGraw-Hill, 1982).

A better but more complicated book than any of the above is Sleepers, Wake! Technology and the Future of Work by Barry Jones (Oxford University Press, New York, 1982).

Ferguson, Marilyn. The Aquarian Conspiracy: Personal and Social Transformations in the 1980s. J. P. Tarcher Co., Los Angeles, 1980. A popular book expressing the personal transformations occurring among people of all backgrounds--individual changes in values, priorites, and life-styles which are and will eventually lead toward a collective societal transformation, ultimately resulting worldwide in a new age.

Fuller, Buckminster. Critical Path. St. Martins Press, New York, NY, 1981. Fuller observes that the world is at a critical period of choice. Technology, et al, now makes it possible to solve the majority of the global ills--we are at the dawning of a golden age. He then cautions "maybe," for that same golden age potential can bring thermonuclear apocalypse. His 1983 sequel, Grunch of Giants (also St. Martins) expands his views, focusing on the vast invisible financial empires, and the inability of politics to solve survival problems. He advocates livingry, not weaponry.

Fuller often rambles and is sometimes difficult to understand, but his many writings, Operating Manual for Spaceship Earth, Utopia and Oblivion, Dymaxion World of Buckminster Fuller, et al., are filled with exciting quotes, proposals, insights, and analyses of the world problems and possible solutions. His July 1983 death left a tremendous void; there is a world need for a new Buckminster Fuller.

Galtung, Johan. The True Worlds: A Transnational Perspective, Free Press, New York, NY, 1980. Galtung states: "no social form is good or bad in itself but only in reference to what it does to people." The current "truth" of the world is seen in the growing destructiveness of war, the persistent failure to satisfy fundamental human needs, and the increasing depletion and pollution of nature, among others.

Giarini, Orio, Ed. Dialogue on Wealth and Welfare: An Alternative View of World Capital Formation. Pergamon Press, Elmsford, New York, NY, 1980. A report to the Club of Rome stressing the need for fundamental change in the economic systems of the world. This major study analyzes current and alternative views on wealth and welfare. It states that the economic systems of the nineteenth and twentieth centuries will not work for the twenty-first century society.

Global 2000. Barney, Gerald, Project Director. Global 2000 Report to the President of the U.S.: Entering the 21st Century, Pergamon Press, Elmsford, NY, 1980, Volume 1 Summary Report; Volume II Technical Supplement; Volume III Global Modeling. Originally developed as a study on the prospects for the year 2000 by fourteen federal agencies. The report covers most of the major global dilemmas; it was presented to the President with concern. This long-range governmental view of the future paints the strong possibility of a pessimistic path toward the new century. New Directions labeled the report "overly optimistic." A follow-up study, Global Future: Time for Action: A Report to the President on Global Resources, Environment, and Population (Council on Environmental Quality, 722 Jackson Place NW, Washington, D.C.) 1981, presents ideas for action by the United States and other countries for a vigorous response to the problems identified by the earlier Global 2000 Report.

Goldsmith, Edward, et al. A Blueprint for Survival. Houghton, Mifflin, Boston, 1972. The writers argue that the industrial way with its ethos of expansion is not sustainable. The reasons are ecosystems and social systems disruptions, population and food supply calamities, and the outlook for energy and nonrenewable resources. Though an early seventies book, its views are still current.

Gribbon, John. Future Worlds. Plenum Publishers, New York, NY, 1981. Gribbon focuses on four choices which lie ahead related to the distribution of the fruits of world productivity between rich and poor nations. There can be (1) high growth, high equality (big cake fairly shared); (2) high growth, low equality (big cake hogged by rich); (3) low growth, low equality (small cake fairly shared); (4) low growth, low equality (small cake hogged by rich). To reach the best of the four, high growth equally shared, the vicious circle of squandering resources on the war machine must be reduced; otherwise, the widening inequalities between nations will lead to greater capacity and, thus, potential to wage war. Scenario (1) can be reached if nations can make a major reduction in the arms race.

Harding, Jim et al. Tools for the Soft Path. International Project for Soft Energy Paths, Friends of the Earth, San Francisco, 1982. An excellent survey and introduction to appropriate technology. Special attention is given to four areas: Techniques for an Efficient, Renewable Energy Future; Focusing on Efficiency; Third World Soft Paths; Institutional Aspects. One hundred twenty brief essays present hopeful and practical steps toward a soft path energy future.

Harman, Willis. An Incomplete Guide to the Future, W. W. Norten, New York, NY, 1979. Originally published by the San Francisco Book Company in 1976, this remains an excellent introductory overview to the awesome powers the global society now has, the potential crises and opportunities, and the radical restructuring of the human condition needed in the years ahead. Clear, concise views on many topics are included, by one of the leading futures thinkers.

Harrington, Michael. Socialism. Saturday Review Press, New York, NY, 1972. This book is considered the best work on contemporary socialism, especially as viewed to its role in the 21st century. Other Harrington books such as The Vast Majority: A Journey to the World's Poor (Simon and Schuster, New York, NY, 1977); Decade of Decision (Simon and Schuster, 1980); and The Politics at God's Funeral: The Spiritual Crisis of Western Civilization (Holt, Rinehart, Winston, 1983) are all worth reading.

Hastings, Arthur, et al., eds. Health for the Whole Person--The Complete Guide to Holistic Medicine. Westview Press, Boulder, Colorado, 1981. Though not specifically a futures-oriented book, it does present a complete review of the concept of holistic medicine, and alludes to the change in the future from medicine to health. Of great value to those interested in health futures is the annotated bibliography and editorial guide to the most pertinent resource materials.

Hawken, Paul, James Ogilvy and Peter Schwartz. Seven Tomorrows: Toward a Voluntary History, Bantam Books, New York, NY, 1982. Seven possible scenarios for the next two decades are described. They suggest that human

choice can make a difference. Including both optimistic and pessimistic views, the scenarios are accompanied by statistics and other data to support the trend. The seven are The Official Future; The Center Holds; Mature Calm; Chronic Breakdown; Apocalyptic Transformation; Beginnings of Sorrow; and Living Within Our Means.

A helpful companion book by Paul Hawken is The Next Economy, Holt, Rinehart, and Winston, New York, 1983.

Heilbroner, Robert. An Inquiry Into the Human Prospect: Updated and Reconsidered for the 1980s, W. W. Norten, New York, NY, 1980. The original An Inquiry Into the Human Prospect was published in 1974. One of the gloomy views of the future, Heilbroner presented a pessimistic outlook in the areas of overpopulation, war, pollution, and knowledge, including the notion that humankind might not be able to overcome the current world crises without repressive rule by government. This edition, six years later, projects Heilbroner's views of the eighties. Further clarifications of his views on economics are contained in Five Economic Challenges (with Lester Thurow, Prentice Hall, Englewood Cliffs, NJ, 1981).

Helmer, Olaf. Looking Forward: A Guide to Futures Research. Sage Publications, Beverly Hills, California, 1983. A good introductory book to a study of futures research by the co-inventor of the Delphi method.

Helmer has been a pioneer in researching the future. The book explains important concepts and methods, and covers such topics as computerization, urban change, population trends, military technology, education and schooling, less-developed countries, space, the criminal justice system, and the economy. It projects some conceivable features of the world in the year 2100.

Henderson, Hazel. Creating Alternative Futures: The End of Economics. Berkeley Publishing, New York, NY, 1978. Hazel Henderson provides a critique of mass consumption, industrial societies, dominant corporations and bureaucracies, traditional economic views, and citizen involvement. Part I covers flaws in present economic thought; Part II proposes new approaches. A later book, The Politics of the Solar Age: Alternatives to Economics. (Doubleday/Anchor) New York, NY, 1980, updates and expands her views. Henderson has gained an increasing audience as she continues to discuss the need for economic and societal transformations.

Houston, Jean. Life Force: The Psycho-Historical Recovery of Self. Delacorte Press, New York, NY, 1981. Jean Houston is a leading writer in the areas of human potential and brain/mind research. She notes in this book that society has reached the point where shared certainties about religion, government, economics, values, et al, are disintegrating--and that present educational methods do not serve the complexity of the times. Human potential must move beyond 10 percent use--and from conceptual to perceptual involvement. Combines well with The Aquarian Conspiracy: Personal and Social Transformation in the 1980s (Marilyn Ferguson, J. P. Tarcher Publishers, Los Angeles, 1980).

Hughes, Barry. World Futures: A Critical Analysis of Alternatives. Johns Hopkins University Press, Baltimore, 1985. The clash of "prophets" over the past ten years has been dramatic, as to whether an optimistic, pessimistic, or status quo future lies ahead in the nineties and the 21st century. This book reviews the various proposals and positions, as well as data, on a number of major topics. The various alternatives open to humankind are explored. Closes with view that transitions are occurring, that choices are available, and that people can determine and/or influence the future.

Jantsch, Erich and C. H. Waddington, Eds. Evolution and Consciousness: Human Systems in Transition. Addison Wesley, Reading, PA, 1976. Erich Jantsch previously has written Design for Evolution: Self-Organization and Planning in the Life System: Technological Forecasting in Perspective; and Technological Planning and Social Futures. These focus on forecasting, planning, and policy formation, the process of planning, and inter- and trans-disciplinary roles. This publication, co-edited before his death, with British Scientist C. H. Waddington, updates the views of a group of futures writers, and constitutes a serious look at the philosophical frontiers of human evolution.

Kahn, Herman. The Coming Boom: Economic, Political, and Social. Simon and Schuster, New York, 1982. Herman Kahn was one of the most optimistic writers about the future. The Coming Boom focuses on the current Great Transition and is an updating of his thinking previously presented in World Economic Development and The Next Two Hundred Years. Things to Come: Thinking About the Future, with Bruce Briggs, is a shorter update of an early Kahn "classic," The Year 2000: A Framework for Speculation on the Next Thirty-Three Years.

Markley, O. W. and Willis Harman. Changing Images of Man. Pergamon Press, Elmsford Park, NY, 1982. Developed and released earlier as part of the futures studies at the Stanford Research Institute, the report is now being published in book form by Pergamon Press. It has received wide acclaim as an outstanding statement of the human condition--of the human need and potential. The theme indicates that the dominant images of humanity underlie the ways in which institutions are shaped and the young are educated. Included are comments about transformation from 26 other futurists. Considered an underground classic; the provocative views can be combined for reading with Maps of the Mind, Charles Hampden-Turner, MacMillan, 1981.

Masuda, Yoneji. The Information Society as Post-Industrial Society. World Future Society, Bethesda, MD, 1981. Masuda projects the coming innovations which will free people to live more creative and happy lives: computer-controlled vehicle systems, viewer participation in television programs, medical consultation by television, automated supermarkets, et al. He describes the computer usage development program in Japan--one that he predicts will radically alter Japanese society and the western world. Should be read in conjunction with the report from the 4th General Assembly of the World Future Society, Didsbury, Howard, Ed., Communications and the Future: Prospects, Promises, and Problems, World Future Society, 1982, and with Cornish, Ed, Ed., Communications Tomorrow: The Coming of the Information Society, World Future Society, 1981.

Mayur, Rashmi and Frank Feather, Eds. Optimistic Outlooks. Global Futures Network, 26 McGill Street, Toronto, Ontario, Canada M5B 1H2. As the title states, an optimistic view regarding meeting basic human needs, the transformation to a new world order, and managing the future. Though admitting the very serious issues facing people and the planet, the book reflects that individuals do make a difference. There is optimism regarding the enormous potential for creative change on the planet, that the future is limited only by imagination. Among the writers are Herman Kahn, Willis Harman, Marilyn Ferguson, Barbara Hubbard, Hazel Henderson, and Aurelio Peccei.

Meadows, Donella, et al. Groping in the Dark: The First Decade of Global Modelling. John Wiley and Sons, New York, 1982. An interesting and helpful view of modelling, one of the branches of futures studies. Global models are computer models that address social problems of global scope. There have been 10 to 15 developed to date. In this book, seven of the models are covered in some depth. Worth reading with this volume are Making it Happen: A Positive Guide to the Future (John Richardson, U.S. Club of Rome, 1982); Global Modelling Reappraised (Futures, April 1982); and Global Models, World Futures, and Public Policy (Office of Technology Assessment, 1982).

Myers, Norman. The Sinking Ark: A New Look at the Problem of Disappearing Species, Pergamon Press, Elmsford, NY, 1979. Myers indicates that by the late 1980s, humans could be facing a global situation which witnesses one plant or animal species becoming extinct each hour--or perhaps a total of 500,000 by the turn of the century (now updated to near 1,000,000). By the time human communities establish ecologically sound life-styles, the fallout of the species could total several million. Efforts to conserve species could prove a solid step toward a new world order. Updated related books by Myers are The Primary Source: Tropical Forests and Our Future, W. W. Norten, New York, 1984; GAIA: An Atlas of Planet Management (ed.), Doubleday, New York, 1984; and A Wealth of Wild Species: Storehouse for Human Welfare, Westview, Boulder, Colorado, 1983.

Naisbitt, John. Megatrends: Ten New Directions Transforming Our Lives, Warner books, New York, 1982; and updated on six video cassettes from Nightingale-Conant Corporation, 7300 N. Lehigh Avenue, Chicago, Illinois, 60648. This popular current trend book lacks a good introduction, but lacks depth about crucial world problems, such as massive megafamine, 50,000 nuclear warheads, and global unemployment. The updated video cassettes address 12 topics, such as forced technology, national and world economy, short- and long-term considerations, North-South, and either-or or multiple options.

National Academy of Sciences. Frontiers in Science and Technology: A Selected Outlook, W. H. Freeman, San Francisco, 1983. A joint committee report with the National Academy of Engineering and the Institute of Medicine which summarizes the outlook for development in eight areas: genetic program, molecular technology of plants, cell receptors, psychobiology, surface science, turbulence in fluids, lasers, and robots.

A somewhat related volume of interest is The Planets by Bruce Murray (W. H. Freeman, San Francisco, 1983). It updates current solar system information, and discusses possible scenarios for 21st Century planetary exploration.

Nettle, John. The Big Generation. McClelland and Stewart, Toronto, 1980. An intriguing analysis of what is happening in Canada (and applicable to other parts of the world) as a result of the seven million Canadians born between 1951 and 1966. They will constitute one-third of the population of Canada; their early childhood and youthful cultural experiences were different. They hold unique traits. They face housing, job, food shortages, and have witnessed a sharp rise in divorce, depression, and suicide. They will soon be dominant in Canadian politics, and face bankruptcy of their social security system. Canada could see major changes by 1990.

Newland, Kathleen. Productivity: The New Economic Context. Worldwatch Paper #49, Worldwatch Institute, Washington, D.C., 1982. Though only a pamphlet, one of the over 50 excellent Worldwatch Papers covering a variety of topics, Productivity clearly and intelligently explains the concept of the title. Newland, who has written several other fine papers, describes the near term unpredictable course by outlining four positive and four negative conflicting influences. Most all of the Worldwatch Papers are worth reading.

O'Neill, Gerard. 2081: A Hopeful View of the Human Future. Simon and Schuster, NY, 1981. O'Neill paints an optimistic portrait of humanity a hundred years from now. With a bit of luck, the year 2081 will find the grandchildren alive, healthy, and enjoying a luxurious standard of living, both on and off the planet. O'Neill asserts the world will be different as a result of the explosion of technology, especially computers, automation, new energy sources, instant communication, space colonies, and robots that build robots. Millions of people will soon be living on self-sufficient man-made satellites in outer space. Good companion books are The Fertile Stars (Brian O'Leary, Everest House, New York, NY, 1981), and The High Road (Ben Bova, Houghton Mifflin, Boston, MA, 1981).

Panati, Charles. Breakthroughs: Astonishing Advances in Your Lifetime in Medicine, Science, and Technology. Houghton Mifflin, Boston, NY, 1980. Panati discusses the potential breakthroughs in health, nutrition, cancer, infertility, sleep, aging, the brain, earthquake forecasting, physics, communications, energy, transportation, and space. Drill-less dentistry, spray-on bandages, new limbs, weather forecasting, life extension, electronic vision, fusion power, and space agriculture are among the topics.

Peccei, Aurelio. One Hundred Pages for the Future: Reflections of the President of the Club of Rome. Pergamon, Elmsford, NY, 1981. Peccei believed that people can take the future into their own hands and forge a common preferable destiny. The human race appears to be hurtling toward disaster; therefore, it is essential to find a way to change course. Peccei, when President of the Club of Rome, noted that since the founding of the club in 1968, there had been progressive degradation in the state of the world and the human condition. A human revolution, an evolution of the politico-structural systems, and new global policies and strategies are needed. To have the courage of Utopia is the only way to be truly realistic.

Platt, John. "What We Must Do," Science 166, November 28, 1969. Reprinted in Tugwell, Frankin, Ed. Search for Alternatives (Winthrop, 1973). Reviews the multiple crises that confront humans--problems that require mobilization of all our intelligence if we are to prevent our destruction.

Helpful if read in conjunction with Platt's book, The Step to Man (Wiley, 1966). Though of 1960's vintage, the concerns and possible solutions are still valid.

President's Commission for a National Agenda. A National Agenda for the Eighties. U.S. Government Printing Office, Washington, D.C., 1981. (General report and nine panel reports) A general report of a 45-member commission intended to provide a framework for constructive and informed debate about national priorities. In addition to the general report, subpanels provided nine excellent reports on key topics: energy; economy; science; government; policies; corporations; electoral process; quality of life; world community.

Regenstein, Lewis. America the Poisoned: How Deadly Chemicals are Destroying Our Environment. Acropolis Books, Washington, D.C., 1982. A tremendous expose of the toxic chemicals in use in the United States. Twenty years after the disclosure of the problem by Rachael Carson in Silent Spring, the problem has multiplied. The use of toxic chemicals doubled between 1960-1980. One thousand new chemicals are produced each year by profit hungry chemical companies. Chemicals may be part of the cause of the cancer epidemic, as 100,000 chemicals are now in use in American industry.

Rifkin, Jeremy. Algeny. Viking Press, New York, 1983. Algeny, the process of genetic engineering and production of new life, programmed by computer, is another explanation of the evolution of life. The book poses a serious critique of the coming age of bio-engineering. Humans will have the power to refashion nature, but do humans have the right? Algeny effects a major break from the ethical past and can radically transform the concept of life. Algeny can be read with the previous effort of Rifkin, Entropy: A New World View (Viking Press, 1980).

Robertson, James. The Sane Alternative: A Choice of Futures. River Basin Publishing Company, St. Paul, MN, 1978. The book challenges "one-eyed economics" which sees only half of the total socioeconomy. Current efforts suffer from overgrowth of bureaucracy; energy shortages and scarcity of raw materials; ecological disruption; and loss of feedback from grass-roots citizens. Robertson proposes major changes, away from hyper-expansionism toward a "SHE" future: sane, human, ecological. A revised and expanded 1983 edition is available from Spring Cottage, 9 New Road, Ironbridge, Shropshire, England.

Rogers, Carl. A Way of Being. Houghton Mifflin, Boston, MA, 1980. Rogers describes new developments that alter the conceptions of the potential of individuals: the inner energy resources, intuition, transcendent powers, and holistic health. He notes that these constitute a paradigm shift. He foresees a person-centered future world that is more human and humane, if a world holocaust is avoided. The book focuses on the human and human potential in a new era.

Sagen, Carl. The Dragons of Eden: Speculations on the Evolution of Human Intelligence. Random House, New York, NY, 1977. In Dragons of Eden, Sagen writes: "We do not live in traditional and static societies. But our governments, in resisting change, act as if we did. Unless we destroy ourselves utterly, the future belongs to those societies that ..." Also worthwhile: Brocas Brain, Random House, 1977.

Sale, Kirkpatrick. Human Scale. Coward, McCann, and Geoghegan, New York, NY, 1980. Sale stresses that our cities, cultures, ecologies, and lives are eroding through a series of crises, the solutions to which now lead to additional crises. Technofix cannot solve the global dilemma. Society, economics, and politics must return to a human scale.

Salk, Jonas and Salk, Jonathan. World Population and Human Values: A New Reality. Harper and Row, New York, NY, 1981. The Salks conclude that if this era of history can be a positive transition period, people can emerge as human beings in a new reality. The supporting essays are divided into five parts: Sigmoid curves; world population trends; a new epoch; paradox and conflict; and reconciliation. The keys to a positive view of the future involve changing from either/or and win/lose competitive philosophies and short-range fragmental planning to both/and and win/win philosophies and long-range holistic analysis.

A later book by Jonas Salk, Anatomy of Reality: Merging on Intuition and Reason (Columbia U. Press, 1983) reflects in a meditative form the concept of universal evolution.

Schell, Jonathan. The Fate of the Earth. Knopf, New York, NY, 1982. Schell vividly states the nuclear dilemma, stressing that most people have been unwilling to admit the seriousness of the potential catastrophes of a nuclear holocaust. Filled with data as well as the undeniable consequences, Schell indicates that there are over 50,000 nuclear warheads in the world. One 20-megaton bomb, with a yield 1,600 times that of the Hiroshima bomb, would result in a fireball six miles in diameter and would doom about 20 million people. Schell claims that we must be utopian in the efforts to prevent such a war. Currently, he indicates that the world is preparing for self-extermination--and that preparations are improving every day. A later compilation by Schell is The Abolition, Knopf, 1984.

Nuclear War: The Aftermath (Royal Swedish Academy of Sciences--Ambio--Pergamon Press, Elmsford, New York, 1982), an even more devastating report about the results of a nuclear war; Russian Roulette: The Superpower Game (Arthur Cox, Times Books, New York, 1982), which includes comments by a Russian authority; and Thinking About the Next War (Thomas Powers, Knopf, New York, 1982), essays on the seeming inevitability of nuclear war. Should all be read in conjunction with Fate of the Earth, for those who are really concerned with learning as much as possible about the potential of nuclear destruction.

A later and powerful report about the long-term global consequences of nuclear war is The Cold and the Dark: The World After Nuclear War, by Carl Sagan and Paul Ehrlich, W. W. Norten, New York, 1984. The "nuclear winter" (the cold, dark, and radioactivity) poses a tremendous threat to those who might survive the original blasts.

Schumacher, E. F. Small is Beautiful: Economics as if People Mattered. Harper and Row, New York, NY, 1974. Almost a "classic" now in futures literature, this series of lectures and essays present new views of economics, appropriate technology, resources, and the development of the Third World. Schumacher states: "Today we suffer from an almost universal idolatry of giantism. It is therefore necessary to insist on the

virtues of smallness--where this applies." Just prior to his 1977 death, Guide for the Perplexed (Harper and Row) was released. It delves beyond technology and economics into the realms of philosophy and religion. Following his death, Good Work (Harper and Row, 1978), with Peter Gillingham was published. It focuses on how to put the ideas of Schumacher into practice, as does Small is Possible (George McRobie, Harper and Row, 1981) which further simplifies the concept and its implementation.

Sheldrake, Rupert. A New Science of Life: The Hypothesis of Formative Causation. J. P. Tarcher, Los Angeles, 1982. Sheldrake presents perhaps the most far-reaching scientific proposal in decades. His "hypothesis of formative causation" could transform ideas about life, the laws of nature, and consciousness. He claims biology is in a crisis, despite advances in molecular biology and genetic engineering. Unresolved yet include fundamental problems in morphogenesis (the coming into being of form, evolution, learning, and behavior). He also proposes a new scientific process.

Sheldrake should be read in conjunction with another exciting book by the Nobel winner, Roger Sperry: Science and Moral Priority: Merging Mind, Brain, and Human Values, Columbia University Press, New York, 1983.

Simoni, Arnold. Crisis and Opportunity. Schocken Books, New York, 1983. Simoni claims that technological civilization has done little to realize its original promise of universal peace, justice, freedom, and plenty. The crises of today--depletion of resources, worldwide inflation, unemployment, pollution, multinational corporation power, nuclear war, et al.--are taking the shape of opportunities. The only alternative to radical destruction is radical reformation. Individuals must take the lead, for the initiative for fundamental change will not come from within existing institutions.

Sivard, Ruth. World Military and Social Expenditures: An Annual Report on World Priorities (1984). World Priorities, Box 25140, Washington D.C. 20007. Each year Ruth Sivard accounts for the use of world resources, particularly focusing on the constant rise in military expenditures (over 660 billion per year). Military violence is on the rise. Expenditures are outstripping population needs, aggravating world problems that military strength cannot solve. The nuclear stockpile of the U.S., U.S.S.R., U.K., France, and China is the equivalent of one million Hiroshima bombs.

Solzhenitsyn, Alexander, et al. From Under the Rubble. Little Brown, Boston, MA, 1975. An outstanding collection of essays by a number of Soviet dissidents. They deal with socioeconomic systems, self-limitation, the direction of change, Russian destinies, the schism between church and state, and the future of Russia. The concerns are applicable to all nations, and show that sciences and humanities styles can be one when dealing with future directions and survival. Other books by Solzhenitsyn, Warnings to the West, and A World Split Apart, have further implications for the future. Though not closely related to school programs, these three books do provide a different insight into the future.

Theobald, Robert. Beyond Despair: A Policy Guide to the Communications Era. Seven Locks Press, Cabin John, MD, 1981; and Avoiding 1984 (Swallow/Ohio University Press, others, Ohio 1982). Theobald has expressed his views

in a number of books on the need to move out of the Industrial Age and into the Communications Era by creating images of a preferable future, and then through a systems approach, develop such a future. Theobald believes that without a basic change in economic, social, and educational concepts, programs, and values, society will face a collapse. Beyond Despair and Avoiding 1984 outline his major views in a style easily transferrable to the consideration of changes in education.

Toffler, Alvin. The Third Wave. William Morrow, New York, NY, 1980. Toffler reflects the view that the third tidal wave of historical change is now taking place, creating a new civilization. The first wave was the agricultural revolution; the second, the industrial revolution. The book focuses on such topics as the economy, future culture, the post-nuclear family, the electronic cottage, the breakup of the nation-state, and a shift to a new politics for the twenty-first century. Though better known for Future Shock, which is of value, The Third Wave is of more current value. In addition, The Futurists (Random House, New York, NY, 1972) which Toffler edited, presents a variety of articles by over 20 well-known futurists. These express the views up to 1972 of leading thinkers in the futures field. Many of their observations are still valid.

In an extension of The Third Wave, in Previews and Premises (William Morrow, New York, 1983), Toffler clarifies seven major issues: The Economic Upheaval; the Future of Work; The Japanese and Other Myths; Beyond Capitalism and Socialism; Info-Politics; The Revolution in Roles; and Race, Power, and Culture.

Veatch, Robert, Ed. Life Span: Values and Life-Extending Technologies, Harper and Row, New York, NY, 1979. Drugs, genetic interventions, and life-style changes may, within the lifetimes of many yet living, add 20 to 40 years to the life span. The social impact will be phenomenal. Work, leisure, family, education, health, and social security will be uprooted. This Hastings Center and Futures Group research effort covers death and dying and other related topics, as well as offering a 120-item bibliography.

An interesting later volume which interviews 18 leading biologists can be read in conjunction: Futurelife, Michael Salomon, Macmillan, New York, 1983.

Wallechinsky, David and Wallace, Amy and Irving. The Book of Predictions. William Morrow, New York, NY, 1981. An extensive mix of forecasts and predictions in three parts. The most important, Part I, contains a wide sampling of futures projections in the areas of outer space; health; home and family; science and transportation; culture and leisure; war and disasters; and a mixture of other topics. The various interests and projections literally force a discussion of the topics/issues presented by the "experts." It is excellent for use in the classroom, as it enables students to focus on their future life-styles on planet Earth.

Wenk, Edward. Margins for Survival: Overcoming Political Limits in Steering Technology, Pergamon Press, Elmsford, New York, 1979. Edward Wenk has had a career in ocean policy, marine resources, and engineering development, and has been an active leader in the Cousteau Society. He served three

U.S. Presidents in related capacities, and authored Politics of the Ocean. In Margins for Survival, he describes social management of technology and discusses how to steer technology toward intended social goals without unpleasant surprises by anticipating the total effects of technology: social, economic, legal, political, and cultural.

Wiesel, Elie. Legends of Our Time (Schocken Books, New York), 1982; and The Accident (Bantam Books, New York), 1982. These are not futuristic books; they are about the past--the holocaust. But they do relate to the current and future dilemmas and to the human condition. They suggest that we must overcome the past--that we must make a new beginning. The future can be created by understanding the past tragedies and committing new efforts that the future can and will be significantly different and better.

Wilber, Ken. Eye to Eye: The Quest for the New Paradigm. Anchor Press/ Doubleday, New York, 1983; and Russell Peter, The Global Brain, J. P. Tarcher, Los Angeles, 1983. These two books fit nicely together, as both are concerned about the necessity for transpersonal change and new directions in society. Wilber writes that the new comprehensive paradigm seeks balance, and when fully formed will interweave the hard physical sciences, the soft philosophy and psychology, and the transcendental wave of mystical-spiritual religion. Eye to Eye can be read in conjunction with Up from Eden: A transpersonal View of Human Evolution, 1981.

Russell writes that humanity may be evolving into a social superorganism that will soon constitute the "global brain" of an awakening earth conceived and experienced as a living organism.

Both books raise more questions than answers and have some perhaps improbables, but both raise new levels of consciousness.

Yankelovich, Daniel. New Rules: Searching for Self-Fulfillment in a World Turned Upside Down. Random House, New York, NY, 1981. An excellent analysis of the cultural revolution taking place in America. He presents 20 changes in norms that are occurring in society. He is clear that tomorrow will not be the same--that there will be no return to the life-styles of yesterday, and that the attempt to do so will only have short-range survival.

Self-fulfillment is changing in a world turned upside down. This book on the cultural factors interrelates well with volumes by other authors on the electronic and biological revolutions; the three coming revolutions will dramatically change the future, if the majority of the projections prove to be accurate. It will be "a world turned upside down." A lengthy excerpt from the book is found in the article, "New Rules for American Life: Searching for Self-Fulfillment in a World Turned Upside Down," Psychology Today, April 1981.

The Nine American Lifestyles: Who We Are and Where We're Going by Arnold Mitchell (MacMillan, 1983) is a good companion reader.

Summary: The books listed merely touch the surface. Educators interested in futures need to see all of the parts as interdependent wholes. To accomplish this means reading in at least the following areas, among others: environment, ecology, forecasting, goals, government, economics, health,

energy, nutrition, human potential, stress, life-styles, transportation, oceans, education, space, science fiction, utopias, technology, communications, transformation, evolution, violence, justice, work, mobility, cultures, world order, regionalism, and spirituality.

Other authors besides those highlighted should be read. For space reasons, and to provide a cross section of authors and topics, many excellent writers were not annotated, but several have publications which would have to be considered more significant than some of those listed above. A number, but not all, of these writers are identified below, along with those included in the annotated section.

Amara, Roy
Asimov, Isaac
Barnet, Richard
Bell, Daniel
Best, Fred
Bezold, Clement
Borsodi, Ralph
Boulding, Elise
Boulding, Kenneth
Bright, James
Brown, Harrison
Brown, Lester
Bundy, Robert
Burns, James
Capra, Fritjof
Cetron, Marvin
Chase, Stewart
Clarke, Arthur
Cleveland, Harlan
Club of Rome
Cornish, Edward
Cousteau, Jacques
Daley, Herman
Dator, James
Doxiadis, Constantinos
Drucker, Peter
Dubos, Rene
Eckholm, Erik
Ehrlich, Paul
Epstein, Samuel
Esfandiary, F. M.
Falk, Richard
Feather, Frank
Ferguson, Marilyn
Ferkiss, Victor
Flechtheim, Ossip
Forrester, Jay
Fromm, Erich
Fuller Buckminster
Gabor, Dennis
Galtung, Johan
Gans, Herbert
Gardner, John
Goldsmith, Edward
Gross, Bertram
Hardin, Garrett
Harkins, Arthur
Harman, Willis
Harrington, Michael
Hayek, Freiedrich
Hayes, Denis
Heilbroner, Robert
Heinlein, Robert
Helmer, Olaf
Henderson, Hazel
Herzog, Arthur
Hess, Karl
Houston, Jean
Hubbard, Barbara
Huxley, Aldous
Illich, Ivan
Jantsch, Erich
Johansen, Robert
Joseph, Earl
Jouvenal, Bertrand de
Jungk, Robert
Kahn, Herman
King, Alexander
Koestler, Arthur
Laszlo, Ervin
Linstone, Harold
Lovins, Amory
Magorah, Maruyama
Marien, Michael
Markley, O. W.
Masini, Eleonora
Masuda, Yoneji
Maxmen, Jerrold
May, Rollo
McHale, John
McLuhan, Marshall
Mead, Margaret
Meadows, Dennis
Meadows, Donella
Michael, Donald
Muller, Ronald
Mumford, Lewis
Myers, Norman
Newland, Kathleen
Naisbitt, John
Nilles, Jack
Oberg, James
Ogilvy, James
Oltmans, Willem
O'Neill, Gerard
Orwell, George
O'Toole, James
Panati, Charles
Peccei, Aurelio
Pirages, Dennis
Platt, John
Polak, Fred
Robertson, James
Rogers, Carl
Rosenfeld, Albert
Roszak, Theodore
Sagen, Carl
Sale, Kirkpatrick

Salk, Jonas
Sarason, Seymour
Schell, Jonathan
Schumacher, E. F.
Simoni, Arnold
Solzhenitsyn, Alexander
Stokes, Bruce
Taylor, Gordon
Theobald, Robert
Teilhard de Chardin, Pierre
Theobold, Robert
Thompson, William

PART II: VIEWS OF EDUCATIONAL FUTURISTS - RECENT AND PAST

The educational futures field is growing. Below are listed some examples of the current writers. Much of the best material is still in article, speech, or seminar form; it has yet to be translated to book, tape, or film.

Barnes, Ronald. Tomorrow's Educator: An Alternative to Today's School Person. Transitions, Inc., 1845 S. Dobson Rd., Mesa, AZ, 85202, 1977-84. Ron Barnes, former educational planner for the proposed Minnesota Experimental City, has produced twelve pamphlets on areas of the future and change. All are good. The other titles are: A Look Back at Educational Transitions; Change: Alternatives to Thoughtless Resistance; Stress: Alternatives to Fearing it; Human Growth: An Alternative to Stagnation; Futures: Alternatives to Passivity and the Past.

Carnegie Council on Higher Education. Three Thousand Futures: The Next Twenty Years for Higher Education. Jossey-Bass, San Francisco, CA, 1980. This policy study from the Carnegie Council projects both the optimistic and pessimistic trends for higher education during the eighties and nineties. It contains basic data, current directions, and futures forecasts of interest to those involved in postsecondary education.

Cetron, Marvin, et al. Schools of the Future: Education into the 21st Century. McGraw-Hill, New York, 1985. Cetron and his co-authors describe some expected future trends in society, and then try to relate those to coming changes in education. A number of the education projections are based upon current reforms, rather than a far-reaching view. Others are a rehash of the good ideas from the sixties. However, there are enough significant directions clarified to make it worthwhile to review this publication when considering education for the future.

Club of Rome. James Botkin, et al., eds. No Limits to Learning: Bridging the Human Gap. Pergamon Press, Elmsford, NY, 1979. This significant report developed by three international research teams shifts the debate from such global resource problems as energy, food, and population to the human element. There is a need to bridge the gap between present human capabilities and the human qualities required to live in a more complex society. It calls for innovative learning and a new concept of anticipatory and participatory learning.

Combs, Arthur. Myths in Education: Beliefs That Hinder Progress and Their Alternatives, Allyn and Bacon, Boston, MA, 1979. One of the major humanistic educators provides a thought-provoking and readable resource for discussing education. Much of it is related to change and alternatives, as the myths described are present practices in schools. It is futuristic in that before schools can move into new learning systems for the next century, they will have to overcome the myths Combs describes as characterizing current education.

Commission on Schooling for the 21st Century. Handbook for Conducting Future Studies in Education. Phi Delta Kappa, Bloomington, Indiana, 1984. A commission created by Phi Delta Kappa looked at the future by creating

several scenarios related to different aspects of the future. The information provides excellent ideas for educators as they consider their next steps. The Handbook concludes with a listing of nationally recognized educators who have been pioneering efforts towards learning for the future.

Council on Learning. Education and the World View: Final Task Force Report and Recommendations. Change Magazine Press, New Rochelle, NY, 1981. Of special importance to those interested in college education. A 40-member task force examined students to see how well prepared they were in the arena of foreign events and world views, how prepared they were for a complex, uncertain future, and how preparation could be improved. They found the students and institutions lacking in the global perspective. The final task report, six volumes, and a planning kit are available. The World in the Curriculum: Curricular Strategies for the 21st Century (vol. 2); Education for a Global Century: Handbook of Exemplary International Programs (vol. 3); and Education and the World View (vol. 4) are especially valuable for educational futures.

Dede, Christopher and Jim Bowman, et al. The Far Side of the Future: Social Problems and Educational Reconstruction, World Future Society, Bethesda, MD, 1978. This book, partly written for the first national educational futures conference, is oriented toward finding solutions, rather than analyzing problems. The focus is on evolving a first step toward new conceptualizations of the goals, methods, and content of education. It takes a global perspective, but indicates that the United States, because of its human and monetary resources, should take the lead toward transforming global education.

Eggers, John. Will You Help Me With the Future Today? Terry. D.O.K. Publishers, Buffalo, NY, 1981. This activities oriented book provides fill-in ideas and short units that teachers can use immediately in their classrooms. It helps take the first step into futures for those who are not able to take a bigger leap into a total school program in futures, or at least a school or program within a school.

Glines, Don. Educational Futures I: Imagining and Inventing; Educational Futures II: Options and Alternatives; Educational Futures III: Change and Reality; Educational Futures IV: Updating and Overleaping; Educational Futures V: Creating and Foresighting. An interdependent series. Anvil Press, Box 37, Millville, MN, 1980. These five books were written as linkages between the views of futures writers and the realities of everyday practicing educators. Books I and IV and V are more futures oriented; II and III deal with the present, with steps toward the future. Books II and III also relate to the alternative education movement. Book I discusses the societal crises and opportunities and the implications for education. Books II and III also relate to the alternative education movement. Book I discusses the societal crises and opportunities and the implications for education. Books II and III explain why curent educational systems are not adequate for coping with future needs, and offer concrete steps toward transforming the learning systems over the next ten years. Book IV returns to a view of the future, with an updating of information and ideas, and an extensive bibliography and resource section. Book V says "do it"--that action is essential. It offers 12 steps to develop a plan, and recent extensive additions to the bibliography. Book V is both a good summary and introduction.

Goodlad, John. A Place Called School: Prospects for the Future. McGraw-Hill, New York, 1983. Though technically not a futures book, it does have an important message and impact for futures-oriented educators. The study of 1,016 classrooms reveals that what is occurring now in the name of schooling is not very satisfactory, and that under present circumstances innovation and change will not occur on a major scale.

However, Goodlad produces some hope that conditions can be improved, that change can occur, and that the future can be brighter. He suggests unit schools as a step in that direction, and describes how they should be organized and conducted.

This is a major contribution to understanding what occurs now in schools and the need for change. It is a challenge for futurists and complements the other well-known Goodlad books of the past 20 years.

Greenleaf, Robert. Servant Leadership (A Journey into the Nature of Legitimate Power and Greatness). Paulist Press, Ramsey, NJ, 1977. An excellent discussion of the flaws in industrial age leadership, but more importantly, a most valuable discourse on the leadership needed for a new age. Especially important are the discussions related to the two traditions in organization; the need for both conceptual and operational leaders on a team; the trust factors that must exist; and the institution as servant. Educational leaders will find this a stimulating, challenging volume which offers concrete suggestions for changing personal and school district leadership styles.

Gross, Ronald. The Lifelong Learner. Simon and Schuster, New York, NY, 1977. The over 65 population will soon outnumber the K-12 students. Adults already constitute a near majority on many campuses. Independent adult learning is described, showing how most everyone can become a self-directed free learner today in preparation for tomorrow. More recent views of Gross are found in The Independent Scholar's Handbook, Addison-Wesley, Reading, MA, 1982.

Harkins, Arthur and Kathleen Redd, Eds. Sourcebook II: Education: A Time for Decisions. World Future Society, Bethesda, MD, 1980. This is the second book produced as a result of the annual conferences on educational futures. It contains articles by 16 persons related to the future of education, focusing on topics discussed at the Minneapolis Convention. Authors include Harold Shane, Edith Weiner, Jean Houston, Earl Joseph, Eleanor Masini, Florence Hood, and other leaders in the educational futures field.

Kaplan, Martin, Ed. What is an Educated Person? The Decades Ahead. Praeger, New York, NY, 1980. A series of articles contemplating the nature of education and the process of being "educated." Speculation is offered as to the changing definition of an educated person during the coming decades.

Kauffman, Draper. Teaching the Future: A Guide to Future-Oriented Education. E.T.C. Publications, Palm Springs, CA, 1976. The author has been very much involved in the futures movement in general, and especially as it relates to education. This book is a practical guide to the use of futuristic materials and approaches in the classroom, and the development of futures oriented curriculum. Another work, Futurism and Future Studies: Developments in Classroom Instruction (N.E.A., 1977) provides additional suggestions.

Kierstead, Fred, et al, Eds. Educational Futures: Sourcebook I, World Future Society, Bethesda, MD, 1979. This book contains selected papers from the first conference on educational futures held in Houston in 1978. The theory of the future of education is blended with practical models, decision-making techniques, and special topics.

Leonard, George.

Education and Ecstasy (1968): This major Leonard effort should be read in concert with The Transformation. The San Francisco Examiner review stated: "Education and Ecstasy is perhaps the most important book on schools, their problems, and their potential written in this generation."

The Transformation (1972): A summary of what Leonard views as inevitable changes in humankind, presented in a stimulating, intriguing, rewarding, confessional style. The pages carry an important message for educators, if the Leonard visions are accepted.

The Ultimate Athlete (1974): There is a need to move beyond being a spectator, shouting for someone else to perform the heroics. In The Ultimate Athlete, "The discredited human animal is heard to roar once more."

The Silent Pulse (1978): Perhaps his most original and comprehensive book, containing a synthesis of theoretical physics, brain research, evolution theory, and studies in consciousness.

These Leonard books are available in paperback form from the author, Box 509, Mill Valley, California 94941. They provide good background for staff in-service discussions.

His latest publication, The End of Sex, discussing the changing societal conditions, is from J. P. Tarcher, Inc., Los Angeles, 1983.

Newitt, Jane. Future Trends in Educational Policy. Lexington Books, Washington, D.C., Heath, Lexington, MA, 1979. Included are essays on the future of public education in America. They provide an examination of current problems and opportunities, with focus on future trends and implications related to a number of school topics.

Olivero, James. Looking at the Challenges of the Future: Providing for Tomorrow's Education Today. Association of California School Administrators, Burlingame, CA, 1978. A manual which can be used for in-service efforts for administrators. It examines the future in general, and provides specific suggestions for current school leaders as they attempt to move from the schools of today toward education for tomorrow.

Packard, Vance. Our Endangered Children: Growing Up in a Changing World, Little Brown, Boston, 1983; and Elkins, David. All Grown Up and No Place To Go: Teenagers in Crisis, Addison-Wesley, Reading, MA, 1984. Two books discuss the problems of youth in the current world. Elkins warns that teenagers face a devastating psychological future and emotional bankruptcy. Packard discusses the antichild culture. The surge of married women into the labor force and the spiralling divorce rate combine with a narcissistic culture to produce modern forms of damnation for children.

Preparedness for the Future Project. Department of Educational and Psychological Research, School of Education, University of Lund, Malmo, Sweden. A series of interviews and published booklets of opinions regarding the ability of education to prepare students for the future. One of the best booklets is Schooling, Education, and the Future by Johan Galtung. Others interviewed about the future of education include Ervin Lazzio, Saul Mendlovitz, Mary White, Christopher Dede, and Don Glines.

Rogers, Carl. Freedom to Learn for the 80's. Charles Merrill, Columbus, Ohio, 1983. A major revision of the original Freedom to Learn, indicating that education is still failing to meet the real needs of society. Rogers calls for more alternatives and independent opportunities, and a human climate where young people can truly experience the excitement of learning. Though not a long-range educational futures projection, it is a major contribution, indicating what schools can do now to begin the transition of the education system.

Rubin, Louis. Educational Reform for a Changing Society: Anticipating Tomorrow's Schools. Allyn and Bacon, Boston, MA, 1978. Louis Rubin has authored and edited several books on curriculum reform, change, and the future of education. This volume includes nine articles which examine trends toward the future. In addition to Rubin, writers include Elise Boulding and Buckminster Fuller.

Shane, Harold. Educating for A New Millennium. Phi Delta Kappa, Bloomington, IN, 1981. A most significant publication. Harold Shane interviewed 132 international scholars as to their opinions about the future, the educational needs of students preparing for the possible futures, curriculum concepts, and the complexities of planning for tomorrow. Special emphasis is given to the 25 years from 1981 to 2006. It is an important volume for educators interested in transitions toward the future, and is valuable to read in conjunction with a previous Shane report, The Educational Significance of the Future (Phi Delta Kappa, 1973). This was one of the first major efforts to turn education toward the future; most of the recommendations are still valid.

Taylor, Paula. The Kids Whole Futures Catalog. Random House, New York, NY, 1982. This book is one to order if individuals and districts are looking for ways to implement futures in the classroom. Growing out of the Creating Futures Project in Minneapolis, the publication is a storehouse of ideas, materials, books, media, and references of immediate use for the teacher and students in current school settings. It is a most valuable resource for those developing a futures focus in education.

Toffler, Alvin, Ed. Learning for Tomorrow: The Role of the Future in Education. Random House, New York, NY, 1974. One of the earlier and more popular publications on educational futures, this anthology of information discusses education in the future tense. The thesis is that all education springs from images of the future, and all education creates images of the future. The footnote and appendix sections are of additional value.

Wagschal, Peter and Robert Kahn, Eds. R. Buckminster Fuller on Education. University of Massachusetts Press, Amherst, MA, 1979. Wagschal and Kahn highlight the educational views of "Mr. Future," Bucky Fuller. More noted for his engineering and ecological designs, Fuller has long reflected on the need to revamp what he considers an obsolescent education system. This volume is a service to educators by its attempt to consolidate the new directions Fuller sees for education.

Wagschal, Peter, Ed. Learning Tomorrows: Commentaries on the Future of Education. Praeger, New York, NY, 1979. A collection of papers prepared for the 1978 "Learning Tomorrows" conference. Authors include Buckminster Fuller, Ivan Illich, Elise Boulding, Hazel Henderson, and seven others who address developing educational topics.

Wehmeyer, Lillian. Images in a Crystal Ball: World Futures in Novels for Young People. Libraries Unlimited, P.O. Box 263, Littleton, CO, 80160. An example of practical applications of futures to the present classroom. The book discusses the role of futuristic literature, ideas, and attitudes. One hundred fifty individual novels are summarized in four different categories. The focus is K-8, including fifty titles recommended as a core for libraries.

Wolf-Wasserman, Miriam and Linda Hutchinson. Teaching Human Dignity: Social Change Lessons for Every Teacher. Education Exploration Center, P.O. Box 7339, Powderhorn Station, Minneapolis, MN, 55407, 1978. A compendium encouraging creative, controversial, pluralistic approaches to curriculum. It is a realistic, grass-roots publication written by and for teachers. It emphasizes participation and self-determination. It is a strong, realistic approach to teaching human dignity. It provides the human touch needed by education in the future.

Summary: There are a number of other publications to consider in addition to, or in place of, the above. Examples are the following:

Gibb, Jack. Trust: A New View of Personal and Organizational Development. Guild of Tutors Press, 1978.

Goodlad, John. Facing the Future. McGraw Hill, 1976.

Hostrop, Richard. Foundations of Futurology in Education. ETC Publications, 1973.

Jennings, Lane and Sally Cornish. Education and the Future. World Future Society, 1979.

LaConte, Ronald and Ellen. Teaching Tomorrow Today: A Guide to Futuristics. Bantam Books, 1975.

Marien, Michael and Warren Ziegler, Eds. The Potential of Educational Futures. Charles Jones, 1972.

Pulliam, John and Jim Bowman. Educational Futurism in Pursuance of Survival. University of Oklahoma Press, 1974.

Reischauer, Edwin. Toward the 21st Century: Education for a Changing World. Knoff, 1973.

Rubin, Louis, Ed. The Future of Education: Perspectives on Tomorrow's Schooling. Allyn and Bacon, 1975.

Shane, Harold. Curriculum Change Toward the 21st Century. A.E.A., 1976.

Sullivan, Edward. The Future of Big-City Schools. ETC Publications, 1975.

An excellent educational futures bibliography, though valid only through 1971, is Alternative Futures for Learning by Michael Marien, an annotated listing of 936 items exploring the future of education, is now out of print, but can be found in a number of libraries, especially the education section in university media centers.

Further, many of the authors listed in the educational change section, and many of those related to human potential, are interwoven with educational futures. Sample writers to consider are Trump, Holt, Hunter, Selye, Glasser, Illich, and Coombs.

PART III: VIEWS OF EDUCATIONAL CHANGE WRITERS - RECENT AND PAST

There are numerous good books on educational change. Only a handful are listed here as examples of the many available to assist educators. They are included in this futures bibliography, as often when schools become interested in futures, they find a need for concrete suggestions on the mechanics of change, and for further rationale for revising present practices. These books, and the list of authors which follow, will help meet those needs.

Bloom, Benjamin. All Our Children Learning (essays on learning research). McGraw Hill, New York, NY, 1980. Bloom tries to synthesize his findings of the past years as to the nature of learning and the environments most conducive to enhance individual potential. It is an excellent resource for those interested in changing and improving the school settings. Human Characteristics and School Learning (McGraw-Hill, 1976), Evaluation to Improve Learning (McGraw-Hill, 1981), Every Kid Can (1973), and Stability and Change in Human Characteristic (1964), should also be read.

Blumberg, Arthur. The Effective Principal: Perspective on School Leadership. Longwood/Allyn and Bacon, Rockleigh, NJ, 1980. A good summary of the findings of a number of studies on the effective school leader by Blumberg and others. Leadership styles are discussed and the characteristics of risk-takers are outlined. A helpful book for the principal interested in achieving change.

Coombs, Philip. The World Educational Crises: A Systems Analysis. Oxford Press, New York, NY, 1968. A competent overview of international trends, indicating the problems of system obsolescence which are afflicting all nations in every part of the world. An excellent bibliography is included. Though a 1960-era publication, it is still of value.

Glasser, William. Schools Without Failure. Harper and Row, NY, 1969. Glasser has written later and perhaps better books (Reality Therapy, Positive Addiction, Stations of the Mind), but this is the initial key publication by the M.D. who challenged many of the current school assumptions, and provided recommendations on how schools could work toward the elimination of failure.

Glines, Don. Educational Futures (1980). (See Educational Futures listings; especially Book II, Options and Alternatives, and Book III, Change and Reality.) Book III is an eight-year description and evaluation of the trend setting Wilson Campus School in Mankato, MN.

Goodlad, John. Behind the Classroom Door. Charles Jones Company, Worthington, OH, 1971. One of the excellent books on educational change by John Goodlad. This one reports studies of what investigators found as they studied daily classroom activities. What was said and written, and what was happening, were two different directions. What Are Schools For? (Phi Delta Kappa, 1979). Nongraded Elementary School (1958), and Curriculum Inquiry (1979), are among six other important books.

However, currently the most important Goodlad contribution is A Place Called School, McGraw-Hill, New York, 1983. Goodlad reviews the findings of an extensive research project to determine what is actually happening in schools. The picture was not very positive. The conclusions call for major rethinking of "a place called school."

Holt, John. What Do I Do On Monday? E. P. Dutton, Company, New York, NY, 1970. John Holt has been prolific in writing about the flaws in current educational efforts and providing recommendations for how to improve. His first major book, How Children Fail, was an attack on the schools. A later book, Beyond Freedom, suggests moving away from schooling. What Do I Do On Monday? is a midstream point of his views on change in education. His 1978 Never Too Late (Dell) examines the potential of students and the failures of the educational system. His 1981 book, Teach Your Own: Parents as Teachers (Delacorte Press, New York) discusses his views that education can flourish at home. How Children Learn and Instead of Education are others.

Howard, Eugene. School Discipline Desk Book, Parker, West Nyack, NY, 1978. An excellent illustration of how the accountability and competency movements can be humanized. Howard provides many concrete examples illustrating that through options and alternatives and a human concern, the evolution process can be a positive force for change and improvement.

Hunter, Madeline. Theory Into Practice Series. Madeline Hunter has produced an exciting series of books, booklets, films, and tapes stressing classroom practices that make a difference. Most any of the Hunter publications are excellent and should be read by those considering change. Order from TIPS Publications, Box 514, El Segundo, CA 90245.

Illich, Ivan. DeSchooling Society. Harper and Row, New York, NY, 1971. Ivan Illich has written several books on a variety of topics urging societal change. In this one, he suggests that schools must be abandoned, and that society must now move beyond schooling toward education as a lifelong learning activity. Most of the Illich books are provocative and challenging.

Meisler, Richard. Trying Freedom: The Case for Liberating Education. Harcourt, Brace, Jovanovich, New York, 1984. Meisler describes in vivid detail the tremendous successes, but ultimate failure, of a small experimental college within a large university. Though the program made great differences in the lives of many students, it was destroyed by professional colleagues, who are described as vain, devious, dishonest, ruthless, treacherous people, endlessly ingenious at finding reasons to go back on their word. The competition in schooling leads to backroom political maneuvers, making gamesmen of instructors who gain power. The university will not provide for freedom in the lives of the students in exercising choices of learning patterns.

Interesting reading with the Meisler book is Growing Minds: On Becoming a Teacher (Herbert Kohl, Harper and Row, New York, 1983).

Michael, Donald. On Learning to Plan--and Planning to Learn. Jossey-Bass, San Francisco, CA, 1973. In this book, plus a prior one, The Unprepared Society: Planning for a Precarious Future (Basic Books, 1968), Michael indicates the great lack of, yet the great need for long-range planning, if positive change is to occur. He indicates the profound role education has in the process.

Rutter, Michael, et al. Fifteen Thousand Hours: Secondary Schools and Their Effects on Children. Harvard University Press, Cambridge, MA, 1979. The report of a three-year study of inner-city schools in inner-city London. They look at the effect of 15,000 hours of schooling on youth; interesting analyses are offered, and both positive and negative results are reported. The study relates to the question of whether schools really can make a difference in the lives of youth.

Rogers, Carl. A Way of Being. Houghton Mifflin, Boston, 1980. This book, though not as directly oriented to education as Freedom to Learn, is a significant contribution in the area of human potential, as is his 1977 volume, On Personal Power (Delacorte).

Silberman, Charles. Crisis in the Classroom. Random House, New York, NY, 1970. One of the most popular books criticizing education; the majority of issues are still right on target over a decade after publication. Silberman called for major reform in schools, and within the educational establishment. His comments are probably more valid now than when he wrote his best seller.

Trump, J. Lloyd. A School for Everyone. National Association for Secondary School Principals, Reston, VA, 1977. Lloyd Trump has been recognized by many as the outstanding educational change leader of the fifties, sixties, and seventies. This book summarizes ways of providing, as the title says, humane schools for everyone. A previous book, Images of the Future (Rand McNally, 1961), is still valuable reading, too.

Summary: For views on educational change and alternatives, most any of the books and articles by the following writers are recommended.

Alexander, William	Eight-Year Study	Holt, John
Allen, Dwight	Fantini, Mario	Howard, Eugene
Anderson, Robert	Featherstone, Joseph	Hunter, Madeline
Barnes, Ron	Freire, Paulo	Illich, Ivan
Barth, Ronald	Frymier, Jack	Jennings, Wayne
Betts, David	Gagne, Robert	Kirschenbaum, Howard
Bennis, Warren	Gibb, Jack	Kohl, Herbert
Bloom, Benjamin	Glasser, William	Kozol, Johnathan
Blumberg, Arthur	Glatthorn, Allan	Kristnamurte, Jiddie
Bremer, John	Glines, Don	Lippitt, Gordon
Brown, B. Frank	Goodlad, John	Lurie, Ellen
Combs, Arthur	Gross, Ronald	Mager, Robert
Coombs, Philip	Guba, Leon	Michael, Donald
Costa, Arthur	Hart, Harold	Miel, Alice
Davies, Don	Havelock, Ronald	Miles, Matthew
Davis, Harold	Herndon, James	Miller, Richard
Dennis, George	Hodgkinson, Harold	Maslow, Abraham

Summary: For views on educational change and alternatives, most any of the books and articles by the following writers are recommended.

Napier, Ron
Neill, A. S.
Olivero, James
Ovard, Glen
Parnes, Sidney
Pavan, Barbara
Piaget, Jean
Postman, Neil
Reimer, Everett
Rogers, Carl
Rogers, Everett
Rogers, Vincent
Rubin, Louis
Saxe, Richard
Schmuck, Richard
Scribner, Harvey
Silberman, Charles
Simon, Sidney
Solo, Leonard
Smith, Vernon
Stufflebeam, Daniel
Taylor, Calvin
Thelan, Herbert
Torrance, Paul
Trump, Lloyd
Washburne, Paul
Weingartner, Charles
Weisgerber, Robert
Wigginton, Eliot
Wiles, Kimball
Williams, Emmett

Perhaps the best single source of all these writers on alternatives and change is the National Humanistic Education Center. They feature an annotated catalog of the major works on educational reform. Write to:

Dr. Howard Kirschenbaum, Director
National Humanistic Education Center
Sagamore Institute
110 Spring Street
Saratoga Springs, New York 12866